

NEW NEOTROPICAL THYSANOPTERA COLLECTED BY
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The present paper brings forward several new genera and a number of new species collected by Mr. C. B. Williams during his residence in Trinidad from 1916 to 1919 and also during a short trip to the Lesser Antilles in March and April 1915.

It was originally intended by Mr. Williams that the material be worked up by us jointly; but my own delay in getting at the task until he had been appointed to the distant post of Entomologist to the Egyptian Ministry of Agriculture has made such co-operative work seem inadvisable. During his various visits to the United States the systematic position of many of the genera and species was worked out by Mr. Williams and tentative manuscript names assigned. These names have been retained except in the case of several of the more interesting and conspicuous forms which, I think, are better named after their collector in recognition of his exceedingly valuable work on this group of insects.

The following descriptions are preliminary to other papers in press or in preparation, and are published at this time in order that the worth of this splendid collection—certainly the largest ever brought out of tropical America—may not be lessened by the otherwise inevitable loss of priority in many of the names.

The holotypes, allotypes, and a portion of the paratypes have most generously been placed by Mr. Williams in my collection.

***Stomatothrips septenarius* sp. nov.**

Female (macropterous).—Length about 1.4 mm. Color testaceous, with head, prothorax, two pterothoracic transverse bands (one near middle and one at base), abdominal segments 3-9, all tibiae and tarsi, and antennal segments 4-9, blackish brown; antennal segments 1-3 yellowish white, 4 paler basally; fore wings pale gray-brown, with two white cross bands, one narrow and at basal sixth, the other wider and at apical seventh,

intermediate brown area somewhat paler at middle; hind wings light gray with two pale bands corresponding in position with those on fore wings. Maxillary palpi *seven*-segmented, the basal segment large; labial palpi five-segmented, the basal segment short. Fore wings somewhat expanded apically, broadest at apical sixth, where they are about 1.6 times as wide as at basal fourth.

Trinidad and St. Thomas; C. B. Williams; taken by sweeping.

The seven-segmented maxillary palpi, the dark brown fourth antennal segment and the narrower fore wings distinguish this species at once from *S. flavus* Hood, the type of the genus, to which it bears a close superficial resemblance.

Frankliniella parvula sp. nov.

Female (macropterous).—Length about 1.1 mm. Color light brown, apex of abdomen darkest; femora usually brown, much paler at apex, tibiae and tarsi pale yellowish gray; antennae with segments 1, 2 and 4-8 brown, 2 darkest, 3 light yellowish gray, 4 and 5 paler basally; wings pale brownish, narrowly lighter along median line; ocellar pigment dull orange. Head about 1.33 times as wide as long. Segment 2 of antennae slightly thickened on dorsum at apex and bearing 2 rather prominent dark bristles; length of antennal segments in microns: 1, 24; 2, 36; 3, 75; 4, 51; 5, 39; 6, 53; 7, 10; 8, 17.

Male (macropterous).—Pale yellow, with a gray-brown blotch at middle of abdominal tergites 2-8; wings almost clear; antennae nearly white, segments 4 and 5 tipped with gray, 6-8 gray.

Trinidad, Grenada, Panama, and Costa Rica; C. B. Williams; on cacao, in various flowers, etc.

Easily recognized by the long third antennal segment. The prolongation of the second segment can be seen to advantage only when viewed from the side.

Frankliniella nigricauda sp. nov.

Female (macropterous).—Length about 1.4 mm. Color bright orange-yellow, head paler, abdomen shading from yellow at base to dark blackish brown or black in apical segments.

Trinidad; C. B. Williams; swept.

The coloration is unique in the genus.

Anaphothrips bicinctus sp. nov.

Female (macropterous).—Length about 1.0 mm. Color dark brown (tip of abdomen darkest), with prothorax, abdominal segments 3-6, legs and segments 3 and 4 of antennæ, abruptly pale yellow; segment 5 of antennæ gray, 6-8 dark brown; wings light gray, with a dark, brownish band across fore wings from basal fifth to near middle.

Trinidad; C. B. Williams; swept.

Very close to *A. alternans* (Bagnall), but separable by the smaller size and the coloration of the abdomen.

Astrothrips angulatus sp. nov.

Female (macropterous).—Length about 1.0 mm. Dorsal surface deeply reticulate. Color yellowish brown, with base of abdomen and sides of pterothorax darker; abdominal segments 8 and 9 with a distal gray band; antennæ yellow, with segments 1 and 2 darker and apices of segments 4, 5 and 6, and all of segment 7, brownish; fore legs yellow, the femora and tibiæ brownish at sides, especially near middle; middle and hind femora and middle tibiæ brown, yellow at either end; middle and hind tarsi and hind tibiæ yellow, the last clouded with brown in apical third; fore wings brown, with three transverse, narrow, white bands, situated at basal fifth, apical two-fifths, and extreme apex, respectively. Vertex slightly elevated but not at all produced or overhanging. Antennæ seven-segmented; segment 1 short, subcylindrical, about as broad as long; 2 the broadest in entire antenna, goblet-shaped, pedicellate; 3 slender, vasiform, pedicellate, about four times as long as wide; 4 about

0.8 as long as 3 and somewhat stouter; 5 about 0.7 as long as 4 and of the same width, oval, pedicellate; 6 equal in length to 5 but more slender, of the same form but inverted, the pedicel being apical and delimited by an oblique transverse line; 7 shorter, very slender; sense cones simple. Prothorax three-fourths as long as head. Abdomen strongly and sharply constricted beyond base of segment 2, which is the longest in entire abdomen; 10 tubular, about 0.7 as wide at base as long, divided above by a longitudinal suture.

Grenada, Guadeloupe and Trinidad; C. B. Williams; on cacao, an unidentified creeper and fustic (*Chlorophora tinctoria*).

Readily known by the seven-segmented antennæ with simple sense cones, the non-produced vertex, and the short prothorax, which is angulate at the sides.

***Astrothrips constrictus* sp. nov.**

Female (macropterous).—Length about 1.1 mm. Dorsal surface deeply reticulate. Color yellowish brown, paler at middle of pterothorax and in last three abdominal segments; segment 10 of abdomen nearly black in apical third; antennæ yellow, with segments 1 and 2 darkened with brown, and apical three-fifths of segment 5 and all of segment 6 unevenly darkened with blackish brown; femora brown; tibiæ brown, narrowly yellow at either end; tarsi yellow; fore wings brown at base (scale darker) and with brown blotches of varying lengths scattered along veins, these blotches forming more or less distinct transverse bands at basal third and apical fourth; ring vein at extreme tip of wing dark brown. Vertex produced, overhanging the insertion of antennæ. Antennæ six-segmented; segment 1 short, subcylindrical, about as broad as long; 2 broadest in entire antenna, goblet-shaped, pedicellate; 3 slender, vasiform, pedicellate, fully five times as long as wide; 4 somewhat more than half as long as 3 and slightly stouter, subfusiform, pedicellate, with an oblique, transverse line beyond middle; 6 about one-third as long as 5, slender; sense cones slender, those on segments 3 and 4 bifurcate beyond base. Abdomen strongly and sharply constricted beyond base of segment 2, which is the

longest in the entire abdomen; 10 strongly constricted at basal fourth, widened beyond, and narrowed again at apex, divided above by a longitudinal suture.

Trinidad; C. B. Williams; on *Lantana* sp.

Recognizable at once by the basal constriction of the tenth abdominal segment and the six-segmented antennæ with their Y-shaped sense cones.

Coremothrips gen. nov.

(Κορεμα, a broom; θρῦψ, a wood worm.)

Body and all appendages very slender, and all bristles of monstrous size, hooked and pinnatifid apically. Head with two pairs of such bristles, one interocellar and the other postocellar; prothorax with two at each of its four angles. Wings very narrow; median vein of fore wing fused with costa, the strengthened anterior margin armed with about fifteen of the usual tremendous bristles disposed in two series, one inclined forward and the other backward; fringing hairs weak and sparse. Segment 9 of abdomen with two pairs of enlarged bristles, segment 10 with one pair.

Genotype: *Coremothrips pallidus* sp. nov.

A striking genus, of undoubted affinities with *Scolothrips*, but far more extreme than even that bizarre form in the development of the bristles of the body and fore wings.

Coremothrips pallidus sp. nov.

Female (macropterous).—Length about 0.9 mm. Color uniform, pale yellowish white.

Trinidad, Panama, and St. Vincent; C. B. Williams; on leaves of cacao and avocado pear.

Flesiothrips octarthrus sp. nov.

Female (macropterous).—Length about 0.9 mm. Head, prothorax and abdomen brown, the latter darker posteriorly; pterothorax pale brownish yellow; legs pale yellow; antennæ

uniform dark brown, somewhat darker than head, except segment 3 which is pale brown, with pedicel and apex pale gray; wings brown, the fore pair without pale band at base, but with an indistinct, narrow, median, pale streak. Antennæ 8-segmented; segment 3 decidedly less than twice as long as wide. Segment 10 of abdomen divided above.

Trinidad; C. B. Williams; no further data.

An undoubted *Plesiothrips*, remarkable for the distinctly eight-segmented antennæ.

***Plesiothrips amblycauda* sp. nov.**

Female (macropterous).—Length about 1.1 mm. Color brown, head darkest, prothorax with bright crimson subhypodermal pigmentation; femora brown, the fore pair yellow at apex; tibiæ gray, fading to pale yellow apically; tarsi pale yellow; antennæ dark brown, about concolorous with head, except segment 3, which has the pedicel and apex pale gray; wings dark brown, without pale band at base. Segment 3 of antennæ more than twice as long as wide. Segment 10 of abdomen not divided above. Ovipositor extremely minute, vestigial, entirely functionless; tip of abdomen rounded, rather than conical.

Trinidad; C. B. Williams; on leaf of Arum lily.

The long third antennal segment and the undivided tenth abdominal segment, together with the dark coloration, make this a very distinct species. It is a true *Plesiothrips*, with antennæ presumably seven-segmented, though the extreme tips of both are missing in the unique type.

***Merothrips cognatus* sp. nov.**

Female (macropterous).—Length about 1.0 mm. Very close indeed to *M. fusciceps* Hood and Williams, but with head smaller (width 0.105 mm.) and eyes larger, these prolonged on ventral surface to a point directly beneath posterior dorsal margin of head, and about equal in width to their interval; tooth on fore tibia minute.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	18	33	36	32	20	25	27	33
Width (μ)	29	27	22	23	17	17	16	13

Trinidad; C. B. Williams; on dead branch of *Lagerstræmia* infested with bromeliads.

This species is separable from *williamsi* Priesner, described from Paraguay, by the much shorter and stouter antennal segments, particularly the fourth, which in *williamsi* is nearly twice as long as wide.

Adraneothrips gen. nov.

(*aspavns*, feeble; *θρψ*, a wood worm.)

Allied to *Haplothrips*, but wings narrowed and parallel-sided beyond base, not constricted at middle, sparsely fringed. Body weakly chitinized. Eyes often prolonged on ventral surface of head. Terminal segment of antenna long and slender, not closely united to 7.

Genotype: *Haplothrips* (?) *tibialis* Hood. The species described by Hood and Williams as *Haplothrips* (?) *bellus* also belongs here, together with the five new species described below.

Adraneothrips simulator sp. nov.

Female (macropterous).—Length about 1.1 mm. Bicolorous; thorax and all of abdomen except tube pale yellow, with a band of bright crimson subhypodermal pigmentation along each side, broadest in pterothorax and abdominal segments 4 and 5; head and tube light brown, segments 8 and 9 of abdomen lightly shaded with brown; antennæ with most of segment 3 and base of 4 pale; tibiæ pale yellow or grayish white; femora shaded with brown. Eyes prolonged on ventral surface of head beyond their posterior dorsal margins; anterior marginal bristles of prothorax long and knobbed.

Male (macropterous).—Smaller and more slender than female.

Trinidad; C. B. Williams; "along midrib on under surface of leaves of undetermined plant."

Like *A. alternatus* in color, but with the eyes distinctly prolonged on ventral surface of head.

***Adraneothrips abdominalis* sp. nov.**

Female (macropterous).—Length about 1.1 mm. Bicolorous; head, thorax, and abdominal segments 1 and 7-10 brown, head darkest, no subhypodermal pigmentation; antennæ with most of segment 3 and bases of 4-6 pale; segments 2-6 of abdomen pale yellow, or 6 lightly brownish; tibiæ pale yellow or grayish white; femora not, or only slightly, darker. Eyes prolonged on ventral surface of head beyond their posterior dorsal margins. Anterior marginal bristles of prothorax long and knobbed.

St. Thomas, West Indies; C. B. Williams; grass.

Easily separable by the abdominal coloration and prolonged eyes.

***Adraneothrips alternatus* sp. nov.**

Female (macropterous).—Length about 1.1 mm. Bicolorous; head, pterothorax and abdominal segments 4 and 5 and 8-10 light brown, much darker than intervening portions and with bright crimson subhypodermal pigmentation; prothorax pale yellow, with a narrow band of crimson pigmentation along sides; legs pale; antennæ with bases of segments 3-6 pale. Head 1.1 times as long as wide; eyes not prolonged on ventral surface of head, about equal in width to their interval and nearly as long as their distance from posterior margin of head.

Male (macropterous).—Smaller and more slender than female, and usually paler in coloration; segment 8 of abdomen usually much paler than 9, often concolorous with paler portions of abdomen.

Trinidad and Panama; C. B. Williams; common on dead banana leaves, on upper side along midrib.

Adraneothrips fuscicollis sp. nov.

Female (macropterous).—Length about 1.1 mm. Bicolourous; head, prothorax, pterothorax and abdominal segments 4 and 5 and 8-10 brown, much darker than the intervening portions and with bright crimson subhypodermal pigmentation; legs pale; antennæ with most of segment 3 and bases of 4-6 pale. Head nearly as wide as long; eyes not prolonged on ventral surface of head, three-fourths as long as their distance from posterior margin of head, about two-thirds as wide as their interval.

St. Lucia, British West Indies; C. B. Williams; from miscellaneous bushes.

Adraneothrips uniformis sp. nov.

Female (macropterous).—Length about 1.1 mm. Unicolourous; pale brown, with bright crimson subhypodermal pigmentation at front and along sides of head, throughout thorax, along sides of abdomen, and in last two abdominal segments; antennæ nearly uniform brown, segment 3 paler basally; legs brown, with trochanters, tarsi, and both ends of all tibiæ, pale. Head 1.09 times as long as wide; eyes not prolonged on ventral surface of head, about equal in width to their interval and only slightly more than one half as long as their distance from posterior margin of head.

Trinidad; C. B. Williams; on dead banana leaves with *A. alternatus*.

Zygothrips speciosus sp. nov.

Male (macropterous).—Length about 1.0 mm. Color dark brown, with abdominal segments 1-6, all tibiæ and tarsi, and antennal segments 3-5, clear pale yellow, almost white; segment 2 of antennæ pale apically, 6 pale in basal half; wings nearly colorless. Postocular bristles nearly pointed. Prothorax with distinct bristles at posterior angles only, outer pair broadly dilated at tip, inner pair nearly pointed.

St. Croix, Dutch (now American) West Indies; C. B. Williams; from grass.

The only species of the genus so colored.

***Hindsiana rhopalocera* sp. nov.**

Female (macropterous).—Length about 1.1 mm. Color yellow; head decidedly darkened with brown, particularly anteriorly; prothorax and sides of pterothorax lightly brownish; abdomen shading to pale grayish brown in segments 8 and 9; tube nearly black except for a narrow, pale, brown band at base and one of equal width at apex; legs uniform pale yellow; antennæ yellow in segments 1-3, uniform dark blackish brown beyond, segment 1 shaded with brownish basally; wings faintly yellowish at base, nearly clear beyond. Head about 1.3 times as long as wide, cheeks parallel; eyes less than one-fourth as long as head, about two-thirds as wide as their interval; postocular bristles long, broadly dilated apically; antennæ with segments 7 and 8 compactly united to form a heavy club which is twice the length of segment 6, segment 8 less than half as long as 7, which is distinctly the longest in entire antenna. Prothorax with all bristles present, subequal to or shorter than postoculars and similarly dilated; median thickening distinct. Wings of fore pair without accessory hairs; outer subbasal bristle short and pointed, others dilated, about as long as those at anterior angles of prothorax. Tube about 0.6 as long as head, less than twice as long as basal width, which is less than twice the apical; sides somewhat concave; terminal bristles more than twice the length of tube.

Guadeloupe, French West Indies; C. B. Williams; from an undetermined plant.

The structure of the last two antennal segments distinguish this species from its congeners.

***Trichothrips calcaratus* sp. nov.**

Female (apterous).—Length about 2.3 mm. Color brownish yellow, with prothorax, pterothorax and basal three-fourths of

tube darkened with brown; extreme tip of tube light gray; abdominal segments 3-8 with a dark brown transverse band on upper surface near base; antennal segments 1 and 2, and basal half of segment 3, yellow and concolorous with head, remainder of antenna dark blackish brown except for the yellowish pedicels of segments 4 and 5; hypodermal pigmentation orange, opaque. Head with two, more or less evident, setose lateral tubercles just behind eyes. Fore tibia produced at lower, inner surface of apex to form a flattened, obtuse spur which is about one-third as long as width of tibia; fore tarsus with a large, straight, acute tooth. Tube 0.75 as long as head.

Male (apterous).—Much like female, but with the two lateral tubercles just behind eyes well-developed and usually very prominent. Fore tibia with an acute, additional projection on inner surface of apex, directly above the flattened, obtuse spur; fore tarsus with the tooth longer than width of tarsus.

Trinidad; C. B. Williams; from dead branch of *Lagerstræmia* infested with Bromeliads, and from bamboo.

The form of the head is suggestive of *T. flavicauda* Morgan. It is the only species of the genus with strongly armed fore tibiæ.

Eurythrips collaris sp. nov.

Male (macropterous).—Length about 1.1 mm. Color blackish brown with purple subhypodermal pigmentation; legs paler, mid and hind tibiæ and all tarsi, pale yellow, fore tibiæ shaded with brown. Antennæ with basal half of segment 3, basal third of 4, and basal fourth of 5 pale yellow. Vertex sharply conical. Antennæ long and slender, all segments elongated. Mouth cone long, fully attaining posterior margin of prosternum. Bristles long, knobbed; prothorax with anterior angulars wanting, all others present, anterior marginals shortest. Fore tarsus unarmed. Wings slender, sparsely fringed, 2 or 3 accessory bristles. Tube very much shorter than head.

Trinidad; C. B. Williams; from dead tree in forest.

The only species of the genus without long bristles at the anterior angles of the prothorax.

Eurythrips gracilicornis sp. nov.

Female (macropterous).—Length about 1.1 mm. General color yellow, with pterothorax and tube dark brown; head brownish yellow, shading to dark brown at sides; legs nearly uniform yellow, femora lightly shaded with brown; abdomen brownish at sides and apically; antennæ brown (excepting segment 3 which is clear yellow), segments 1 and 2 darkest, 1 paler at base, 2 paler at apex, 4-6 paler at base and apex. All segments of antennæ, excepting 1 and 2, very long and slender for the genus, 4 and 5 three times as long as wide. Mouth cone very short, broadly rounded, hardly attaining middle of prosternum. Bristles long and dilated at apex; prothorax with anterior angulars well developed and anterior marginals wanting. Fore tarsus with a long, hooked tooth. Wings brown, fore pair without accessory bristles. Tube very much shorter than head.

Trinidad; C. B. Williams; swept.

Distinguishable by the short mouth cone and tube, and the slender antennæ.

Lissothrips breviceps sp. nov.

Female (brachypterous).—Length about 0.9 mm. Color dark brown with red subhypodermal pigmentation; segments 1, 2 and 4-8 of antennæ nearly concolorous with body, 2 slightly paler, 3 light gray, much the palest in entire antenna; legs dark, tarsi slightly paler. Head hardly 0.8 as long as wide; segment 3 of antennæ conspicuously small and weak. Prothorax with all bristles present and broadly dilated at tip. Fore tarsus unarmed. Tube about 0.8 as long as head, 1.4 times as long as basal width, which is distinctly more than twice the apical.

Male (brachypterous).—Essentially like female but smaller. Trinidad; C. B. Williams; from dead branches.

The antennal coloration, short head, and short, broad tube are distinctive.

Lissothrips pallipes sp. nov.

Female (apterous).—Length about 1.1 mm. Color shading from bright yellow in anterior half of head, through yellowish brown at sides and posterior part of head and in thorax, to nearly black in abdominal segments 5-10, tube brown in apical two-fifths; legs and antennal segments 1 and 2 bright yellow; antennæ shading from yellowish gray in segment 3 to dark brown at tip. Head about 1.1 times as long as wide. Prothorax with anterior marginal bristles wanting, anterior angulars short, mid-laterals shorter than postoculars and shorter than the two pairs at the posterior angles, all bristles pointed. Fore tarsus unarmed. Tube less than 0.8 as long as head and 1.4 times as long as basal width, which is distinctly less than twice the apical.

Trinidad; C. B. Williams; from faggots and branches.

The coloration, long head and pointed bristles readily distinguish this species.

Williamsiella gen. nov.

Head and thorax very small; abdomen exceedingly large and broad. Eyes small. Antennæ 7-segmented; segment 3 very small, shorter and narrower than any of the following segments. Mouth cone long, broadly rounded at tip, fore tarsus unarmed.

Genotype: *Williamsiella bicoloripes* sp. nov.

Evidently a derivative of *Lissothrips*. Separable by the 7-segmented antennæ.

Williamsiella bicoloripes sp. nov.

Female (apterous).—Length about 0.9 mm. Color nearly uniform dark blackish brown, tube paler apically; segments 1 and 2 of antennæ and all femora decidedly paler, the femora somewhat darker in basal half or more; all tibiæ and tarsi and antennal segments 3-7 (except the pale pedicel of 3) dark blackish brown. Head wider than long; postocular bristles pointed, equal in length to head. Prothorax decidedly longer than head,

with prominent pointed bristles at posterior angles only, the outer pair much longer than prothorax. Fore tarsus unarmed. Tube more than half as long as head, nearly as wide at base as long (!).

Male (apterous).—Like female in all essential respects, but smaller.

Trinidad; C. B. Williams; on faggots.

Easily known by the seven-segmented antennæ, long bristles, exceedingly short and broad tube, and the coloration of the legs and antennæ.

Plectrothrips impatiens sp. nov.

Female (macropterous).—Length about 1.7 mm. Prothorax with midlateral and anterior marginal bristles longer than post-oculars. Antennal segments 3-5 each with five (!) sense cones, 6 with three.

Trinidad; C. B. Williams; on cacao leaf.

The only species of the genus with well-developed midlateral and anterior angular bristles on the prothorax, and the only one with more than three sense cones on any antennal segment.

Pristothrips gen. nov.

(*πρίστis*, a saw; *θρίψ*, a wood worm.)

Head much longer than wide, cheeks with one or two strong bristles at basal third or two-fifths; eyes large, much wider than their interval, reniform as seen from above and very closely faceted; intermediate antennal segments moderately elongated, clavate, sense cones not unusually long; mouth cone slender, long and pointed. Fore femora enlarged in both sexes, always with a large subapical tooth on inner surface, sometimes with a row of small teeth basally; fore tibiæ with several (3-8 in the two known species) strong teeth on inner surface; fore tarsus with one long tooth. Wings broad, narrower apically, not constricted at middle, without venation. Tube shorter than head.

Genotype: *Pristothrips aaptus* sp. nov.

Strongly suggestive of *Acanthothrips* and its allies in the armature of the apex of the fore femur and the general details of body structure, but differing from them all in having the fore tibiae armed with several teeth. In several respects it approaches *Machatothrips*, in which, however, the fore tibiae are unarmed. *Ischyrothrips* and *Macrothrips* lack the subapical femoral tooth. *Eupathithrips* has the prominent femoral tooth, but the cheeks are set with large spiniferous tubercles, and the urn-shaped intermediate antennal segments are provided with exceedingly long, slender, sense cones.

***Pristothrips albipunctatus* sp. nov.**

Male (macropterous).—Length 3.0 mm. Color dark brown, abdominal segments 3-7 each with a pair of small, snow-white, lateral spots; intermediate antennal segments yellow, irregularly mottled with brown, 4-6 with a touch of dark blackish brown at extreme base; femora brown; fore tibiae yellow, mottled with brown, mid and hind tibiae brown, distinctly yellowish at either end; tarsi yellow. Head about 1.8 times as long as wide, with two pairs of long, stout bristles in basal two-fifths of cheeks, the apical bristle longer. Prothorax about 0.6 as long as head; bristles at anterior angles exceedingly slender, nearly as long as prothorax, blunt; bristles at posterior angles two-thirds as long, much stouter, blunt; all other bristles wanting. Fore wings with about 30 accessory hairs; two outer subbasal bristles long and pointed, the other shorter and blunt. Fore femur with two subapical teeth on inner surface, the basal one largest and triangular; fore tibia with a row of three large, stout teeth along inner surface, the basal one paired with a fourth one standing alone in another row; fore tarsus with a very long, stout, straight tooth. Tube two-thirds as long as head, 2.5 times as long as basal width, which is fully twice the apical.

Trinidad; C. B. Williams; on bark and faggots.

***Pristothrips aaptus* sp. nov.**

Female (macropterous).—Length 3.2 mm. Color dark brown or black, with intermediate antennal segments irregularly slightly

paler; legs concolorous with body. Head about 1.9 times as long as wide, as broad across eyes as at middle, narrowed to base, with a pair of long, stout bristles at basal two-fifths of cheeks. Prothorax about 0.4 as long as head, anterior margin deeply roundly emarginate, posterior margin perfectly straight; bristles at anterior angles dilated apically, very short, shorter than those at posterior two-fifths of cheeks; one pair of bristles at posterior angles, four times as long as those at anterior angles and dilated apically; all other bristles wanting. Fore wings with about 35 accessory hairs on posterior margin; outer subbasal bristle long and pointed, others shorter, dilated at tip. Fore femora with two subapical teeth on inner surface, the basal one largest and triangular, and followed by a row of about eight smaller, spiniferous tubercles, of which the basal is decidedly the largest; fore tibiae with a row of 7 or 8 strong teeth along inner surface, the apical one longest, the others successively shorter; fore tarsus with a longer, stout, straight tooth. Tube three-fourths as long as head, fully 2.5 times as long as basal width, which is more than twice the apical.

Trinidad; C. B. Williams; on cacao.

The more distal of the two subapical teeth on the inner surface of the fore femur could easily be overlooked in a dark specimen, or one in which the femur is not in just the right position.

***Neurothrips williamsi* sp. nov.**

Female (macropterous).—Length about 1.9 mm. Very close to *N. magnafemoralis* (Hinds) in general structure and in color, but without the femoral tooth of that species. Tube one-half as long as head, uniform blackish brown; segment 9 of abdomen pale brown.

Panama; C. B. Williams; on faggots.

***Macrophthalmothrips williamsi* sp. nov.**

Female (macropterous).—Length about 1.4 mm. Color yellowish white, with the space between eyes, and abdominal

segments 6-10, abruptly nearly black; antennæ nearly white, with segment 2 at sides, all of 5 except pedicel, and all of 7-8 dark brown; legs nearly white, mid and hind tibiæ with a narrow ring of gray near middle; cup of tarsi dark; wings colorless; eyes bright red, a dash of brown behind each; mesothorax lightly marked with brown at sides; metathorax with a brown spot at middle of metascutum and one at each posterior angle; abdominal segments 2 and 3 each with two pairs of minute brown dots, one pair latero-dorsal, the other latero-ventral; segment 4 with the latero-ventral pair only; segments 6-10 with bright red subhypodermal pigmentation.

Trinidad; C. B. Williams; on dead branch of *Lagerstræmia*.

A very beautiful species, as strikingly colored, perhaps, as any in the family. Named after Mr. C. B. Williams, its discoverer.

***Cryptothrips gradatus* sp. nov.**

Female (brachypterous).—Length about 1.6 mm. Color yellow; abdomen shading from brownish yellow in segment 2 to nearly black in basal three-fifths of tube, apex of tube pale; head in front of eyes, and first two antennal segments brownish yellow; segment 3 of antennæ brown, pedicel yellowish; 4-8 dark blackish brown; legs uniform yellow. Head 1.5 times as long as wide, narrowed behind eyes and at base; eyes small, composed of a few large, separated facets; ocelli wanting; postocular and post-ocellar bristles subequal, knobbed; dorsum of head with a pair of pointed bristles behind postoculars. Segment 8 of antennæ conical, closely united to 7. Fore tarsi unarmed. Prothoracic bristles all present, knobbed, those at posterior angles longer than postoculars, others subequal to postoculars. Tube about 0.6 as long as head, less than twice as long as width at base, which is somewhat more than twice the apical.

Tobago, British West Indies; C. B. Williams; from grass.

A true *Cryptothrips*, allied to *C. icarus* Uzel, but readily known by the color, and the form of the last antennal segment.

Cryptothrips acuticornis sp. nov.

Female, forma macroptera.—Length about 1.6 mm. Color nearly uniform dark brown, head somewhat darker than rest of body; tarsi, fore tibiæ and articulations of legs paler, as is also the apical portion of segment 2 of the antennæ and all of segment 3 except the brown apex and a barely perceptible shading at basal two-fifths; segments 4 and 8 of antennæ uniform dark brown. Head very slightly longer than wide, roundly converging from eyes to base; vertex tumid; eyes more than one-third as long as head, slightly more than one-half as wide as their interval; ocelli small, widely separated; postocular bristles blunt but not dilated at tip; postocellars and mid-dorsal pair minute. Segment 8 of antennæ long and slender, four times as long as greatest width, not pedicellate. Fore tarsi unarmed. Wings not narrowed at middle, brownish at extreme base; fore pair with 6 or 7 accessory hairs and with only two subbasal bristles, which are blunt at apex. Prothoracic bristles all present, hardly pointed, the two pairs at posterior angles longest and subequal to postoculars. Tube 0.9 as long as head, more than twice as long as width at base, which is somewhat less than twice the apical.

Female, forma brachyptera.—Almost indistinguishable from the macropterous form save for the short wings.

Male (brachypterous).—Decidedly paler than female, the tube and head dark brown and the intervening portion brownish yellow, darker posteriorly. Fore tarsus armed.

St. Croix and Barbados, West Indies; C. B. Williams; from grass.

A true *Cryptothrips*. The structure of the terminal antennal segment is distinctive.

Cryptothrips connaticornis sp. nov.

Male (macropterous).—Length about 1.4 mm. Color bright yellow, with anterior part of head and all of prothorax brown; mesothorax brownish at sides and along anterior margin; abdomen lightly shaded with brown in basal three or four seg-

ments; tube yellow, tipped with gray; subhypodermal pigmentation maroon red, disposed in head, thorax and abdomen wherever they are shaded with brown and also along sides of abdomen; antennæ bright yellow in segments 1 and 2, segment 3 grayish at tip, 4 shading from yellowish gray at base to brownish gray apically, remaining segments successively darker, 5 and 6 somewhat lightened basally, 7-8 dark blackish brown; mid and hind femora yellowish gray, remainder of legs clear yellow. Body bristles expanded but not divided at apex.

Trinidad; C. B. Williams; from faggots.

Structurally almost indistinguishable from the North American *Cryptothrips junctus* Hood. The figures of that species given in the Canadian Entomologist, Vol. XLIV, p. 140, 1912, would serve almost equally well for this. The coloration, however, is utterly different.

***Barythrips heterocerus* sp. nov.**

Female (macropterous).—Length about 2.1 mm. Color brown, head darker than thorax, abdomen shading to black in tube; legs yellow, femora and tibiæ somewhat darkened with brown, mid and hind tarsi slightly darker; antennæ with segments 1 and 2 about concolorous with legs, 1 darker, 2 paler at apex; 3 pale yellowish white in basal sixth, bright lemon yellow in apical two-fifths, darkly shaded with blackish brown between; 4 bright yellow in apical three-fifths, remainder darkened with brown; 5 brown basally and apically, brownish yellow at middle; 6 brown, with a yellowish tinge, particularly at middle; 7 and 8 dark blackish brown. Head 1.2 times as long as wide; cheeks slightly rounded, with three prominent bristles; segment 8 of antennæ inserted on ventral surface of apex of 7. Prothorax about 0.6 as long as head; two pairs of bristles at posterior angles moderately long and pointed, others short. Fore tarsus with a long, stout, curved tooth. Wings short, broad, nearly colorless, fore pair with 12 or 13 accessory hairs; subbasal bristles subequal, short, pointed. Tube about equal in length to head, fully 2.5 times as long as basal width and 2.3 times as wide at base as at the abruptly constricted apex.

St. Thomas, West Indies; C. B. Williams; swept from grass and in epiphytic bromeliad on tree.

Male (brachypterous).—Very much like female in color and structure, but smaller and slenderer.

I am not perfectly satisfied with the assignment of this species to *Barythrips*, but have put it here until the female of *Barythrips sculpticauda* Hood and Williams shall have been made known. Both species agree in most of the important details of structure, and furthermore have the intermediate antennal segments dark at base and pale apically—an inversion of color pattern which is unusual. The mode of insertion of the eighth antennal segment in *heterocerus* is of interest.

***Pygothrips conifer* sp. nov.**

Female (macropterous).—Length about 1.3 mm. Brown, shading to almost black in segments 8 and 9 of abdomen; tarsi and articulations of legs paler; “tube” bright brownish orange, tipped with black; segments 1 and 2 of antennæ clear yellow, 3 yellow at extreme base, remainder of antennæ shading to dark blackish brown in last segment; wings light brown, darker at base, with a pale median streak. Head fully as wide as long; eyes about 0.4 as long as head and two-thirds as wide as their interval. Prothorax 0.6 as long as head, all bristles pointed. Wings without accessory hairs on posterior margin. Fore tarsus with a short, strong tooth. “Tube” sub-conical, fully 1.4 times as long as basal width, sides nearly straight.

Trinidad; C. B. Williams; from dead branch of *Lagerstræmia* infested with bromeliads.

More closely allied to *metulicauda* Karny from Java, than to *rugicauda* Hood, the genotype. This and the following are the first species of their group to be recorded from the New World.

***Pygothrips nigricauda* sp. nov.**

Female (macropterous).—Length about 1.7 mm. Color dark brown, shading to opaque coal-black in “tube” and distal

half of abdomen; femora brown at base, shading to bright yellow apically; fore tibiæ yellow, shaded with brown at sides, mid and hind tibiæ darker than femora; tarsi brownish yellow; antennæ yellow in segments 1 and 2, 1 lightly shaded with darker at base; 3 yellowish brown, paler at base of pedicel and distinctly lighter in color than rest of antenna, which is nearly black. Head 1.3 times as long as wide, broadest just behind eyes, thence tapering to base, which is about 0.85 as broad; eyes about one-fourth as long as head, hardly four-fifths as wide as their interval. Prothorax slightly more than half as long as head, bristles pointed. Wings with 5-7 accessory hairs. Fore femora long, swollen, fore tarsi with a long, stout, curved tooth. "Tube" subconical, about 1.36 times as long as basal width, sides slightly arched.

Male (brachypterous).—Slenderer than female, with fore femora greatly swollen and longer than head; tarsal tooth long and curved.

Trinidad; C. B. Williams; from branches.

The long head is distinctive.

Bradythrips Hood and Williams, gen. nov.

(βραδύς, slow; θρῦψ, a wood worm).

Antennæ seven-segmented. Vertex of head with one pair of prominent bristles; antennal segments 3-5 decidedly longer than wide; tube much longer than head, very slender, fully ten times as long as greatest width and with four long hairs at tip.

Genotype: *Bradythrips hesperus* Hood and Williams, sp. nov.

Allied to *Urothrips* Bagnall by the 7-segmented antennæ but abundantly distinguished by the other characters given in the diagnosis.

Bradythrips hesperus Hood and Williams sp. nov.

Female (apterous).—Length about 1.8 mm. Color straw yellow, with head (except sides), pterothorax, and middle legs, brown; abdomen at sides, tip of tube, hind legs, and last antennal segment, shaded with brown or gray; bright red sub-

hypodermal pigmentation in head, pterothorax, and along sides of abdomen.

British Guiana; C. B. Williams; at base of *Imperata caudata*.

This and the following are the first species of their superfamily to be recorded from the New World.

Stephanothrips occidentalis Hood and Williams, sp. nov.

Female (apterous).—Length about 1.4 mm. Color straw yellow, with head, prothorax, and fore femora (except apex) dark brown; tube brightened with yellow, shading to dark brown at extreme apex. Vertex of head with three pairs of long bristles, which are slightly expanded at tip, the middle pair about three-fifths as long as third antennal segment, others shorter, outer pair set close to, but at a lower level than, the other. Ninth abdominal segment about 2.6 times as long as eighth. Tube nearly 1.5 times as long as head and about 1.8 times as long as ninth abdominal segment.

St. Croix and Trinidad; C. B. Williams; from bushes.

Readily known from its congener by the characters given above.